

Narcolepsy and Other Somnolence Disorders

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Narcolepsy is an uncommon neurological disorder and an interface between pediatric and adult neurology. According to previous publications, the prevalence of narcolepsy is higher in Asian countries than in Western and Middle East countries. Excessive daytime sleepiness (EDS) in narcolepsy can be confused with subjective sleepiness or fatigue in atypical depression. There are overlapping symptoms between narcolepsy and major depressive disorder based on DSM-IV criteria, for example, loss of interest, fatigue and psychomotor retardation. The diagnosis of narcolepsy without cataplexy is even more difficult as some other disorders, for example, chronic sleep deprivation and delayed sleep phase syndrome (DSPS) can also cause sleep onset REM period (SOREMP) in multiple sleep latency test (MSLT). Cataplexy should be differentiated from atonic seizure by being triggered by strong emotion, such as laughter, anxiety or surprise. Video-EEG monitoring is helpful to confirm cataplexy in difficult cases. Hypnagogic hallucination can result in secondary delusion so narcolepsy is sometimes confused with psychotic disorders, such as schizophrenia. CSF hypocretin/orexin levels can not be routinely measured in Taiwan. The role of CSF hypocretin/orexin, as the role of HLA DR15 and DQB1*0602, is controversial, particularly in patients without cataplexy. Methylphenidate is the first line of CNS stimulants in Taiwan but is not the treatment of choice for EDS in narcolepsy. The most common adverse effects of methylphenidate are headache and poor appetite; however, some patients can suffer from tachycardia, irritability or aggression. Modafinil has much less adverse effects but is much more expensive than methylphenidate. The safety profile of modafinil in children needs further clarification. The treatment of choice for cataplexy is antidepressants; however, antidepressants with 5-HT₂ antagonism, for example, noradrenergic and specific serotonergic antidepressants (NaSSAs) and Tricyclic antidepressants (TCAs) should be used cautiously as they can deteriorate EDS. Further randomized controlled trials (RCTs) are needed to strengthen the evidence of efficacy of selective serotonin reuptake inhibitors (SSRIs), serotonin and norepinephrine reuptake inhibitors (SNRIs) and norepinephrine and dopamine reuptake inhibitors (NDRIs) in treating cataplexy. The role of sodium oxybate, which is still not available in the market in Taiwan, is also discussed.